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EXAMINER	
LAZARO, DAVID R	

ART UNIT	PAPER NUMBER
2155	

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/759,089	DONAHUE, THOMAS P.	
	Examiner	Art Unit	
	David Lazaro	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-10,12-15,17-36,38-59 and 61-68* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,6-10,12-15,17-36,38-59 and 61-68* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment filed 12/28/05.

2. Claims 1-4, 34 were amended.

3. Claims 5, 11, 16, 37 and 60 are canceled.

4. Claims 1-4, 6-10, 12-15, 17-36, 38-59 and 61-68 are pending in this office action.

Response to Arguments

5. Applicant's arguments with respect to claims 1-4, 6-10, 12-15, 17-36, 38-59 and 61-68 have been considered but are moot in view of the new ground(s) of rejection.

6. The rejection of Claim 1 under 35 U.S.C., 112, second paragraph, is maintained.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1, 2, 6, 14, 27, 28, 39, 30, 32 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claims 1, 2, 6, 14, 27, 28, 39, 30, 32 recite the limitation "preselected criterion". There is insufficient antecedent basis for this limitation in the claim. The examiner suggests simply changing, in claim 1, "for the presence of at least one criterion" to "for the presence of at least one preselected criterion".

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 1-4, 6-8, 12, 13, 15, 17-21, 23, 27-33 and 65-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Implementing a Generalized Tool for Network Monitoring" by Ranum et al. (Ranum) in view of U.S. Patent 6,266,664 by Russell-Falla et al. (Russell-Falla) and U.S. Patent 6,453,345 by Trcka et al. (Trcka).

12. With respect to Claim 1, Ranum teaches in a computer network, a method for maintaining an acceptable use policy comprising:

receiving input from a user selecting event types and patterns for use in monitoring network communications (Page 1 - Background and Motivation - points 2 and 3; Page 2 - first paragraph under Decision Engine).

monitoring TCP/IP network communications (Page 2 - first paragraph under Decision Engine);

storing at least some of said TCP/IP network communications (Page 2 - Packet Suckers - packet capture is mainly referenced as using buffers for storing packets, only explicit example is a RAM buffer), even when the communication does not conform to a known protocol (Page 2 - Packet Suckers - packet suckers capture raw data packets of the network interface; note also Page 5, 2nd paragraph under N-code Filtering, the NFR engine can handle any packets sent under TCP/IP);

testing the stored communications for the presence of at least one criterion (Pages 2-3: all of *Decision Engine*, Pages 5-6: all of N-code Filtering), wherein the criterion are defined by a user (Pages 2-3: all of *Decision Engine*, Pages 5-6: all of N-code Filtering - noting that the filters are defined by the user according to users wants and needs), and is associated with the event types and patterns (Page 1 - Background and Motivation - points 2 and 3; Page 2 - first paragraph under Decision Engine; Pages 5-6: all of N-code Filtering; note also that criterion may include strings and patterns found within packets, such as email senders);

deleting the communications if the presence of said at least one preselected criterion is not determined (Page 2: 2nd paragraph under *Decision Engine* - packets are discarded after filtering);

storing the communications if the presence of said at least one preselected criterion is determine (Page 2: 2nd paragraph under *Decision Engine* - record mechanism logs data to backends. Backends are described on pages 3-4. examples of storing communications based on the presence of the criterion are given on pages 5-6 under N-code Filtering).

Ranum does not explicitly disclose the at least some of said TCP/IP network communications being stored on a disk. Trcka teaches raw data packets can be captured and stored on a disk (Col. 7 lines 13-27).

Ranum does not explicitly disclose that a user is a selecting a subject matter category for use in monitoring network communications such that the at least one criterion is associated with the user selected subject matter category and comprises one

or more regular expressions. Russell-Falla teaches the use of subject matter categories for use in monitoring network communications (Col. 4 lines 45-60). Communications are tested for criterion associated with a selected subject matter category (Col. 4 line 61 - Col. 5 line 35). The at least one criterion comprises one or more regular expressions (Col. 5 lines 3-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Ranum and modify it as indicated by Trcka and Russell-Falla such that the method further comprises receiving input from a user selecting a subject matter category for use in monitoring network communications; storing at least some of said TCP/IP network communications on disk; and testing the stored communications for the presence of at least one criterion, wherein the criterion are defined by a user, is associated with the user selected subject matter category, and comprises one or more regular expressions. One would be motivated to incorporate the teachings of Trcka as there is need for providing adequate space for storing captured data packets (In Trcka: Col. 7, lines 13-27; and In Ranum: Page 2 - *Packet Suckers)*. One would be motivated to incorporate the teachings of Russell-Falla as there is need for monitoring specific subject matter categories (In Russell-Falla: Col. 2 lines 24-36; and In Ranum: see abstract which discusses suggested applications which related to monitoring particular types of events and applications).

13. With respect to Claim 2, Ranum and Trcka further teaches using any number of filters and that the number of filters is based on the user's needs (In Ranum: Page 2: Decision Engine; Page 6: Performance).

Ranum and Trcka does not explicitly disclose wherein the preselected criterion comprises two or more subject matter categories. Russell-Falla teaches the use of subject matter categories for use in monitoring network communications (Col. 4 lines 45-60). Specifically, the invention can be used to detect any specific type of selected content (Col. 4 lines 45-60 - several example subject matter categories are listed).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Ranum and Trcka and modify it as indicated by Russell-Falla such that the method further comprises wherein the preselected criterion comprises two or more subject matter categories. One would be motivated to have this, as there is need for detecting any specific type of selected content related to subject matter categories (In Russell-Falla: Col. 2 lines 24-36).

14. With respect to Claim 3, Ranum further teaches wherein said subject matter categories comprise regular expressions (In Russell-Falla: Col. 5 lines 3-35).

15. With respect to Claim 4, Ranum further teaches wherein said regular expressions are weighted based on input received from a user (In Russell-Falla: Col. 4 lines 4-13 and Col. 6 lines 56-65 - particularly note that the training sets to determine the weights must be designated by human. In other words, a human (i.e., a user) must designate whether a training samples is in the particular category or not. The examiner considers this to be within the scope of the claim).

16. With respect to Claim 6, Ranum further teaches wherein the preselected criterion is weighted (In Russell-Falla: Col. 5 lines 16-35).

17. With respect to Claim 7, Ranum further teaches wherein said regular expressions are weighted with either positive or negative values (In Russell-Falla: Col. 3 line 60 – Col. 4 line 3).

18. With respect to Claim 8, Ranum and Trcka does not explicitly state wherein regular expressions within a subject matter category having a negative value are processed before regular expressions having a positive value.

Russell-Falla teaches the processing of regular expressions with both negative and positive values for a given subject matter category (Col. 5 lines 16-35). Based on the algorithm (Col. 5 line 25), it is mathematically arbitrary as to whether negative values are processed before positive values.

As such, It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Ranum and Trcka and modify it as indicated by Russell-Falla such that the method further comprises wherein regular expressions within a subject matter category having a negative value are processed before regular expressions having a positive value. One would be motivated to have this, as it is an arbitrary design choice since the overall sum determines the score (In Russell-Falla: Col. 5 lines 16-35).

19. With respect to Claim 12, Ranum further teaches wherein the computer network is a wide area network (In Ranum: Page 2 - Overview of the NFR Architecture; Page 5 N-code filtering; and Page 6 Performance - noting that the intended network is any

suitable network such as those running TCP/IP and Ethernet protocols, which would include wide area networks).

20. With respect to Claim 13, Ranum further teaches wherein the computer network is a local area network (In Ranum: Page 2 - Overview of the NFR Architecture; Page 5 N-code filtering; and Page 6 Performance - noting that the intended network is any suitable network such as those running TCP/IP and Ethernet protocols, which would include local area networks).

21. With respect to Claim 15, Ranum further teaches said subject matter categories comprise key words (Col. 3 lines 1-9 of Russell-Falla).

22. With respect to Claim 17, Ranum further teaches assigning a threshold value to each subject matter category (Col. 5 lines 47-64 of Russell-Falla).

23. With respect to Claim 18, Ranum further teaches at least some of said subject matter categories comprise one or more predetermined expressions (Col. 3 lines 36-51 of Russell-Falla).

24. With respect to Claim 19, Ranum further teaches assigning a value to said predetermined expressions (Col. 3 lines 59-66 of Russell-Falla).

25. With respect to Claim 20, Ranum further teaches summing the values of said predetermined expressions (Col. 3 line 60 – Col. 4 line 3 of Russell-Falla).

26. With respect to Claim 21, Ranum further teaches said communication is further stored (In Ranum: Page 2: 2nd paragraph under *Decision Engine* - record mechanism logs data to backends. Backends are described on pages 3-4. examples of storing communications based on the presence of the criterion are given on pages 5-6 under N-

code Filtering) if the sum of values of said predetermined expressions comprising a subject matter category equal or exceed the threshold value assigned to said subject matter category (Col. 5 lines 47-64 and Col. 6 lines 29-34 of Russell-Falla).

27. With respect to Claim 23, Ranum further teaches said threshold values assigned to said subject matter categories are variable (Col. 5 lines 47-64 of Russell-Falla).

28. With respect to Claim 27, Ranum further teaches outputting a report relating to the presence of said at least one preselected criterion (In Ranum: Pages 3-4, see figures).

29. With respect to Claim 28, Ranum further teaches wherein said report identifies individuals whose use of the computer network included communications which matched preselected criterion (In Ranum: Abstract, Page 3, *backends* and Fig. 1, Page 6 *Events*).

30. With respect to Claim 29, Ranum further teaches wherein said report identifies network addresses where communications were received or originated that included matched preselected criterion (In Ranum: Abstract, Page 3, *backends* and Fig. 1).

31. With respect to Claim 30, Ranum further teaches outputting a report relating to the presence of the preselected criterion, wherein report identifies the number of matches in a category (In Ranum: Abstract, Page 3, *backends* and Fig. 1).

32. With respect to Claim 31, Ranum further teaches wherein said report is in a graphical format (In Ranum: Pages 3-4 see figures).

33. With respect to Claim 32, Ranum further teaches wherein said report provides the text of all communications that match said preselected criterion (In Ranum: Abstract, Page 3, *backends* and Fig. 1, Page 6 *Events*).

34. With respect to Claim 33, Ranum further teaches wherein said report is in a human readable format (In Ranum: Pages 3-4 see figures).

35. With respect to Claim 65, Ranum further teaches wherein at least one stored half session comprises a plurality of independent parts, and the testing is performed individually on each independent part (In Trkca: Col. 12 line 65 - Col. 13 line 49 and Col. 6 lines 1-25).

36. With respect to Claim 66, Ranum further teaches wherein the independent parts comprise individual emails (In Russell-Fall: Col. 8 lines 51-60) and (In Trcka: Col. 14 line 61 - Col. 15 line 9).

37. With respect to Claim 67, Ranum further teaches wherein the independent parts comprise message attachments (In Russell-Fall: Col. 8 lines 51-60) and (In Trcka: Col. 14 line 61 - Col. 15 line 9).

38. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ranum in view of Trcka and Russell-Falla as applied to claim 4 above, and further in view of U.S. Patent 5,878,423 by Anderson et al. (Anderson).

39. With respect to Claim 9, Ranum in view of Trcka and Russell-Falla does not explicitly disclose prioritizing the order which regular expressions within a subject matter category are tested.

Anderson teaches prioritization of the use of keywords with corresponding subject matter categories (Col. 11 lines 1-12 and lines 40-46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Ranum in view of Trcka and Russell-Falla and modify it as indicated by Anderson such that the method further comprises prioritizing the order which regular expressions within a subject matter category are tested. One would be motivated to have this, as it improves searching by providing the more important and useful information first (In Anderson: Col. 11 lines 40-46).

40. With respect to Claim 10, Ranum in view of Trcka and Russell-Falla further teaches wherein said prioritizing reduces the likelihood of false hits (In Anderson: Col. 11 lines 40-46).

41. Claims 14, 22, 24, 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ranum in view of Trcka and Russell-Falla as applied to claim 2 above, and further in view of U.S. Patent 5,371,807 by Register et al. (Register).

42. With respect to Claim 14, Ranum in view of Trcka and Russell-Falla does not explicitly disclose where the presence of the preselected criterion in at least one of said categories comprises a match in a plurality of categories.

Register teaches a plurality of categories associated with regular expressions, where the presence of preselected criterion in at least one of the categories can mean a match in a plurality of categories (Col. 5 lines 34-61 and Col. 7 lines 12-24).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Ranum in view of Trcka and Russell-Falla and modify it as indicated by Register such that the method further comprises where the presence of the preselected criterion in at least one of said categories comprises a match in a plurality of categories. One would be motivated to have this, as there is need for detecting any specific type of selected content related to subject matter categories (In Russell-Falla: Col. 2 lines 24-36).

43. With respect to Claim 22, Ranum in view of Trcka and Russell-Falla does not explicitly disclose wherein the threshold value of at least one subject matter category comprises equaling or exceeding the threshold value in a plurality of subject matter categories.

Register teaches a plurality of categories associated with regular expressions, where the presence of preselected criterion in at least one of the categories can mean a match in a plurality of categories (Col. 5 lines 34-61 and Col. 7 lines 12-24). This may occur in a hierarchical fashion (Col. 9 lines 51-63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Ranum in view of Trcka and Russell-Falla and modify it as indicated by Register such that the method further comprises wherein the threshold value of at least one subject matter category

comprises equaling or exceeding the threshold value in a plurality of subject matter categories. One would be motivated to have this, as there is need for detecting any specific type of selected content related to subject matter categories (In Russell-Falla: Col. 2 lines 24-36).

44. With respect to Claim 24, Ranum in view of Trcka and Russell-Falla does not explicitly disclose wherein said subject matter categories have a hierarchical relationship.

Register teaches a plurality of categories associated with regular expressions, where the presence of preselected criterion in at least one of the categories can mean a match in a plurality of categories (Col. 5 lines 34-61 and Col. 7 lines 12-24). The categories have a hierarchical relationship (Col. 9 lines 51-63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Ranum in view of Trcka and Russell-Falla and modify it as indicated by Register such that the method further comprises wherein said subject matter categories have a hierarchical relationship. One would be motivated to have this, as there is need for detecting any specific type of selected content related to subject matter categories (In Russell-Falla: Col. 2 lines 24-36).

45. With respect to Claim 25, Ranum in view of Trcka and Russell-Falla further teaches wherein said hierarchical relationship comprises defining the threshold value for at least one subject matter category as the presence of predetermined expressions in a

plurality of other subject matter categories (In Register: Col. 5 lines 34-61 and Col. 9 lines 51-63).

46. With respect to Claim 26, Ranum in view of Trcka and Russell-Falla further teaches said hierarchical relationship comprises defining the threshold value for at least one subject matter category as matching or exceeding the threshold value assigned to a plurality of other subject matter categories (In Register: Col. 5 lines 34-61 and Col. 9 lines 51-63).

47. Claims 34-36, 38, 39, 44, 47-55, 57-59 and 61-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell-Falla in view of Runam and U.S. Patent 5,835,722 by Bradshaw et al. (Bradshaw).

48. With respect to Claim 34, Russell-Falla teaches a method for monitoring and maintaining an acceptable use policy for computer network usage (Col. 1 lines 26-34) comprising:

capturing data on a network (Col. 4 line 61 – Col. 5 line 4) wherein the data comprises multiple half sessions of TCP/IP communications (It is inherent that any network communication data on a network such as the Internet/Web -Col. 4 line 61 - Col. 5 line 21 and Col. 1 lines 37-45 - would comprise multiple half sessions of TCP/IP communications);

removing data content that does not contain language elements (Col. 5 lines 5-11 - the examiner considers the act of identifying and analyzing natural language elements to be within the scope of the limitation);

testing the remaining content for the presence of predetermined expressions (Col. 5 lines 5-11) wherein the predetermined expressions comprise two or more categories (Col. 4 lines 45-60 and Col. 9 lines 9-12) each containing predetermined expressions (Col. 5 lines 5-35);

maintaining a sum of values associated with said predetermined expressions found within at least one category (Col. 3 line 65 – Col. 4 line 3);

determining if the remaining data is within a category if the sum of values associated with said predetermined expressions within a category meets or exceeds a threshold value (Col. 5 lines 5-64).

Russell-Falla does not explicitly disclose the predetermined expressions are defined by a user. Bradshaw teaches the use of predetermined expressions to identify a category where the predetermined expressions can be defined by a user (Col. 7 lines 18-38).

Russell-Falla does not explicitly disclose storing the data when the data is determined to be within a category. Ranum teaches the storage of data for purposes of logging and auditing when the data is found to have the presence of predetermined expressions (Page 1 - Background and Motivation - points 2 and 3; Page 2 - first paragraph under Decision Engine and Page 2: 2nd paragraph under *Decision Engine* - record mechanism logs data to backends. Backends are described on pages 3-4.

examples of storing communications based on the presence of the criterion are given on pages 5-6 under N-code Filtering).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Russell-Falla and modify it as indicated by Ranum and Bradshaw such that the method further comprises wherein the predetermined expressions comprise two or more categories each containing predetermined expressions defined by a user; and storing the remaining data if the sum of values associated with said predetermined expressions within a category meets or exceeds a threshold value. One would be motivated to incorporate the teachings of Bradshaw as there is need for allowing users to define the expressions related to particular subject matter categories (In Bradshaw: Col. 2 lines 34-45 and Col. 7 lines 18-38). One would be motivated to incorporate the teachings of Ranum as it is desirable by network managers to be able to log and review particular types of network events and communications (In Ranum: see abstract).

49. With respect to Claim 35, Russell-Falla further teaches the computer network is a wide area network (Col. 1 lines 37-45 of Russell-Falla).

50. With respect to Claim 36, Russell-Fall further teaches wherein the computer network is a local area network (In Ranum: Page 2 - Overview of the NFR Architecture; Page 5 N-code filtering; and Page 6 Performance - noting that the intended network is any suitable network such as those running TCP/IP and Ethernet protocols, which would include local area networks).

51. With respect to Claim 38, Russell-Falla further teaches said expressions are weighted (Col. 3 lines 55-67 of Russell-Falla).

52. With respect to Claim 39, Russell-Falla further teaches said expressions are weighted with either positive or negative values (Col. 3 line 60 – Col. 4 line 3 of Russell-Falla).

53. With respect to Claim 44, Russell-Falla further teaches said expressions are regular expressions (Col. 3 lines 1-6 of Russell-Falla).

54. With respect to Claim 47, Russell-Falla further teaches said threshold value for a category is variable (Col. 5 lines 47-63 of Russell-Falla).

55. With respect to Claim 48, Russell-Falla further teaches outputting a report relating to the presence of predetermined expressions (Col. 6 lines 29-34 of Russell-Falla).

56. With respect to Claim 49, Russell-Falla further teaches said report identifies individuals whose use of the computer network included communications which matched predetermined expressions (Col. 6 line 29-34, note the functionality of the report in Russell-Falla is tied to a user - Col. 6 lines 15-21 of Russell-Falla) and (In Ranum: Abstract, Page 3, *backends* and Fig. 1, Page 6 *Events*).

57. With respect to Claim 50, Russell-Falla further teaches said report identifies network addresses where communications were received or originated that included matched predetermined expressions (In Ranum: Abstract, Page 3, *backends* and Fig. 1).

58. With respect to Claim 51, Russell-Falla further teaches outputting a report relating to the presence of predetermined expressions, wherein said report identifies the number of matches in a category (In Ranum: Abstract, Page 3, *backends* and Fig. 1).

59. With respect to Claim 52, Russell-Falla further teaches wherein said report is in a graphical format (In Ranum: Pages 3-4 see figures).

60. With respect to Claim 53, Russell-Falla further teaches wherein said report provides the text of all communications that match said predetermined expressions (In Ranum: Abstract, Page 3, *backends* and Fig. 1, Page 6 *Events*).

61. With respect to Claim 54, Russell-Falla further teaches wherein said report is in a human readable format (In Ranum: Pages 3-4 see figures).

62. With respect to Claim 55, Russell-Falla teaches a method for monitoring and maintaining an acceptable use policy for computer network usage (Col. 1 lines 26-34) comprising:

capturing TCP/IP data on a network (Col. 4 line 61 – Col. 5 line 4);

removing data content that does not contain language elements (Col. 5 lines 5-11 - the examiner considers the act of identifying and analyzing natural language elements to be within the scope of the limitation);

defining categories (Col. 4 lines 45-67 - can detect any selected type of content, several example subject matter categories are listed) with weighted predetermined expressions (Col. 3 lines 36-51).

testing the remaining content for the presence of predetermined expressions (Col. 5 lines 5-11);

maintaining a sum of values associated with said predetermined expressions found within each category (Col. 3 line 65 – Col. 4 line 3);

determining if the remaining data is within a category if the sum of values associated with said predetermined expressions present within a category exceeds a threshold value (Col. 5 lines 47-64 and Col. 6 lines 29-34).

Russell-Falla does not explicitly disclose the predetermined expressions are defined by a user. Bradshaw teaches the use of predetermined expressions to identify a category where the predetermined expressions can be defined by a user (Col. 7 lines 18-38).

Russell-Falla does not explicitly disclose storing the data when the data is determined to be within a category. Ranum teaches the storage of data for purposes of logging and auditing when the data is found to have the presence of predetermined expressions (Page 1 - Background and Motivation - points 2 and 3; Page 2 - first paragraph under Decision Engine and Page 2: 2nd paragraph under *Decision Engine* - record mechanism logs data to backends. Backends are described on pages 3-4. examples of storing communications based on the presence of the criterion are given on pages 5-6 under N-code Filtering).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Russell-Falla and modify it as indicated by Ranum and Bradshaw such that the method further comprises wherein the predetermined expressions comprise two or more categories each containing predetermined expressions defined by a user; and storing the remaining data if the sum

of values associated with said predetermined expressions present within a category exceeds a threshold value. One would be motivated to incorporate the teachings of Bradshaw as there is need for allowing users to define the expressions related to particular subject matter categories (In Bradshaw: Col. 2 lines 34-45 and Col. 7 lines 18-38). One would be motivated to incorporate the teachings of Ranum as it is desirable by network managers to be able to log and review particular types of network events and communications (In Ranum: see abstract).

63. With respect to Claim 57, Russell-Falla further teaches the threshold value for a category is defined as the presence of no predetermined expressions (Col. 5 lines 47-64 of Russell-Falla).

64. With respect to Claim 58, Russell-Falla further teaches the computer network is a wide area network (Col. 1 lines 37-45 of Russell-Falla).

65. With respect to Claim 59, Russell-Fall further teaches wherein the computer network is a local area network (In Ranum: Page 2 - Overview of the NFR Architecture; Page 5 N-code filtering; and Page 6 Performance - noting that the intended network is any suitable network such as those running TCP/IP and Ethernet protocols, which would include local area networks).

66. With respect to Claim 61, Russell-Falla further teaches outputting a report relating to the presence of predetermined expressions whose sum meets or exceed the threshold value of a category (Col. 6 lines 29-34).

67. With respect to Claim 62, Russell-Falla further teaches said report identifies individuals whose use of the computer network included communications which

contained predetermined expressions whose sum matched or exceeded the threshold value of at least one category (Col. 6 line 29-34, note the functionality of the report in Russell-Falla is tied to a user - Col. 6 lines 15-21 of Russell-Falla) and (In Ranum: Abstract, Page 3, *backends* and Fig. 1, Page 6 *Events*).

68. With respect to Claim 63, Russell-Falla further teaches wherein said report identifies network addresses where communications were received or originated that included predetermined expressions whose sum matched or exceeded the threshold value of at least one category (In Ranum: Abstract, Page 3, *backends* and Fig. 1).

69. With respect to Claim 64, Russell-Falla further teaches wherein said report is in a graphical format (In Ranum: Pages 3-4 see figures).

70. Claims 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell-Falla in view of Ranum and Bradshaw as applied to claim 39 above, and further in view of Anderson.

71. With respect to Claim 40, Russell-Falla in view of Ranum and Bradshaw does not explicitly disclose prioritizing the order in which regular expressions within a subject matter category are tested.

Anderson teaches prioritization of the use of keywords with corresponding subject matter categories (Col. 11 lines 1-12 and lines 40-46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Russell-Falla in view of Ranum and Bradshaw and modify it as indicated by Anderson such that the method further comprises prioritizing the order which regular expressions within a subject matter category are tested. One would be motivated to have this, as it improves searching by providing the more important and useful information first (In Anderson: Col. 11 lines 40-46).

72. With respect to Claim 41, Russell-Falla in view of Ranum and Bradshaw does not explicitly disclose wherein the negative valued regular expressions are tested first.

However, Russell-Falla teaches the processing of regular expressions with both negative and positive values for a given subject matter category (Col. 5 lines 16-35). Based on the algorithm (Col. 5 line 25), it is mathematically arbitrary as to whether negative values are processed before positive values.

As such, It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Ranum and Trcka and modify it as indicated by Russell-Falla such that the method further comprises wherein the negative valued regular expressions are tested first. One would be motivated to have this, as it is an arbitrary design choice since the overall sum determines the score (In Russell-Falla: Col. 5 lines 16-35).

73. With respect to Claim 42, Russell-Falla in view of Ranum and Bradshaw does not explicitly disclose wherein said negative and positive valued regular expressions are separately tested in order of largest value to smallest value.

However, Russell-Falla teaches the processing of regular expressions with both negative and positive values for a given subject matter category (Col. 5 lines 16-35). Based on the algorithm (Col. 5 line 25), it is mathematically arbitrary as to whether the negative and positive valued regular expressions are separately tested in order of largest value to smallest value.

As such, It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Ranum and Trcka and modify it as indicated by Russell-Falla such that the method further comprises wherein said negative and positive valued regular expressions are separately tested in order of largest value to smallest value. One would be motivated to have this, as it is an arbitrary design choice since the overall sum determines the score (In Russell-Falla: Col. 5 lines 16-35).

74. With respect to Claim 43, Russell-Fall further teaches wherein the order of said prioritizing is determined based upon reducing the likelihood of false hits (In Anderson: Col. 11 lines 1-12 and lines 40-46).

75. Claims 45, 46 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell-Falla in view of Ranum and Bradshaw as applied to claim 34 above, and further in view of Register.

76. With respect to Claim 45, Russell-Falla in view of Ranum and Bradshaw does not explicitly disclose wherein the threshold value for at least one category comprises meeting or exceeding the threshold value for a plurality of other categories.

Register teaches a plurality of categories associated with regular expressions, where the presence of preselected criterion in at least one of the categories can mean a match in a plurality of categories (Col. 5 lines 34-61 and Col. 7 lines 12-24). This may occur in a hierarchical fashion (Col. 9 lines 51-63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Ranum in view of Trcka and Russell-Falla and modify it as indicated by Register such that the method further comprises wherein the threshold value for at least one category comprises meeting or exceeding the threshold value for a plurality of other categories. One would be motivated to have this, as there is need for detecting any specific type of selected content related to subject matter categories (In Russell-Falla: Col. 2 lines 24-36).

77. With respect to Claim 46, Russell-Falla in view of Ranum and Bradshaw does not explicitly disclose wherein the threshold value of at least one category comprises meeting or exceeding the threshold value for at least one other category and not meeting or exceeding the threshold value for at least another category.

Register teaches a plurality of categories associated with regular expressions, where the presence of preselected criterion in at least one of the categories can mean a match in a plurality of categories (Col. 5 lines 34-61 and Col. 7 lines 12-24). This may occur in a hierarchical fashion (Col. 9 lines 51-63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Ranum in view of Trcka and Russell-Falla and modify it as indicated by Register such that the method further comprises wherein the threshold value of at least one category comprises meeting or exceeding the threshold value for at least one other category and not meeting or exceeding the threshold value for at least another category. One would be motivated to have this, as there is need for detecting any specific type of selected content related to subject matter categories (In Russell-Falla: Col. 2 lines 24-36).

78. With respect to Claim 56, Russell-Falla in view of Ranum and Bradshaw does not explicitly disclose wherein said remaining data is stored only if the sum of predetermined expressions exceeds the threshold value in a plurality of categories.

Register teaches a plurality of categories associated with regular expressions, where the presence of preselected criterion in at least one of the categories can mean a match in a plurality of categories (Col. 5 lines 34-61 and Col. 7 lines 12-24). This may occur in a hierarchical fashion (Col. 9 lines 51-63).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Ranum in view of Trcka and Russell-Falla and modify it as indicated by Register such that the method further comprises wherein said remaining data is stored only if the sum of predetermined expressions exceeds the threshold value in a plurality of categories. One would be motivated to have this, as there is need for detecting any specific type of selected content related to subject matter categories (In Russell-Falla: Col. 2 lines 24-36).

79. Claim 68 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ranum in view of Trcka and Russell-Falla as applied to claim 1 above, and further in view of U.S. Patent 5,850,388 by Anderson et al. (C.Anderson).

80. With respect to Claim 68, Ranum in view of Trcka and Russell-Falla does not explicitly disclose prior to testing, attempting to identify a protocol by comparing the stored half session with known protocol patterns.

Anderson teaches identifying a protocol by comparing an unknown protocol with known protocol patterns (Col. 18 lines 38-62).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Ranum in view of Trcka and Russell-Falla and modify it as indicated by C.Anderson such that the method further comprises prior to testing, attempting to identify a protocol by comparing the stored half session with known protocol patterns. One would be motivated to have this, as it is desired for effective analysis and monitoring of network performance (In C.Anderson: Col. 3 line 2-16 and Col. 4 lines 1-11).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 571-272-3986. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Lazaro
March 31, 2006

SALEH NAJJAR
SUPERVISORY PATENT EXAMINER